(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 14 August 2003 (14.08.2003)

PCT

(10) International Publication Number WO 03/066569 A1

- (51) International Patent Classification?: 69/96
- C07C 68/06,
- (21) International Application Number: PCI/KR03/00237
- (22) International Filing Date: 3 February 2003 (03.02.2003)
- (25) Filing Language:

Korean

(26) Publication Language:

English

(30) Priority Data:

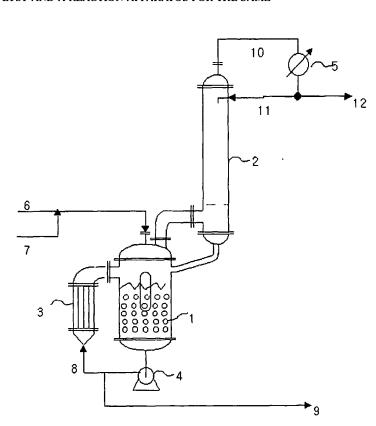
10-2002-0006585 5 February 2002 (05.02.2002) KR 10-2003-0002772 15 January 2003 (15.01.2003) KR

(71) Applicant (for all designated States except US): LG CHEM, LTD. [KR/KR]; LG Twin Tower, Yoido-dong 20, Youngdungpo-ku, Seoul 150-721 (KR).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): WOO, Boo-Gon [KR/KR]; 8-401 LG Employee's apt., Doryong-dong, Yuseong-gu, Daejeon-city 305-340 (KR). KWAK, Ja-Hun [KR/KR]; 6-206 LG Chem, Ltd. apt., Doryong-dong, Yuseong-gu, Daejeon-city 305-340 (KR). HONG, Moo-Ho [KR/KR]; 103-505 Dongseonggukhwa apt., Samcheon-dong, Seo-gu, Daejeon-city 302-222 (KR). HONG, Mi-Jeung [KR/KR]; 6-703 Geumho apt., Yeoseo-dong, Yeosu-city, Jeollanam-do 550-260 (KR).
- (74) Agent: YOU ME PATENT & LAW FIRM; Teheran Bldg., 825-33, Yoksam-dong, Kangnam-ku, Seoul 135-080 (KR).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK,

[Continued on next page]

(54) Title: CONTINUOUS METHOD FOR PREPARING AROMATIC CARBONATE USING A HETEROGENEOUS CATALYST AND A REACTION APPARATUS FOR THE SAME



(57) Abstract: The present invention relates to a continuous method for the preparation of an aromatic carbonate by reacting a dialkyl carbonate and an aromatic hydroxy compound in the presence of a heterogeneous catalyst, and a reaction apparatus for the same. The continuous method comprises the step of reacting dialkyl carbonate and an aromatic hydroxy compound in the presence of the heterogeneous catalyst in a loop-type, catalyst-containing reaction apparatus, wherein a reactor equipped with a filter in which the catalyst is contained is connected with a heat exchanger portion for providing necessary heat during the reaction, reaction solution is circulated between the catalyst-containing portion and heat exchanger via a circulation pump, and by-products can be eliminated via a distillation column connected with the reactor.

WO 03/066569 A1